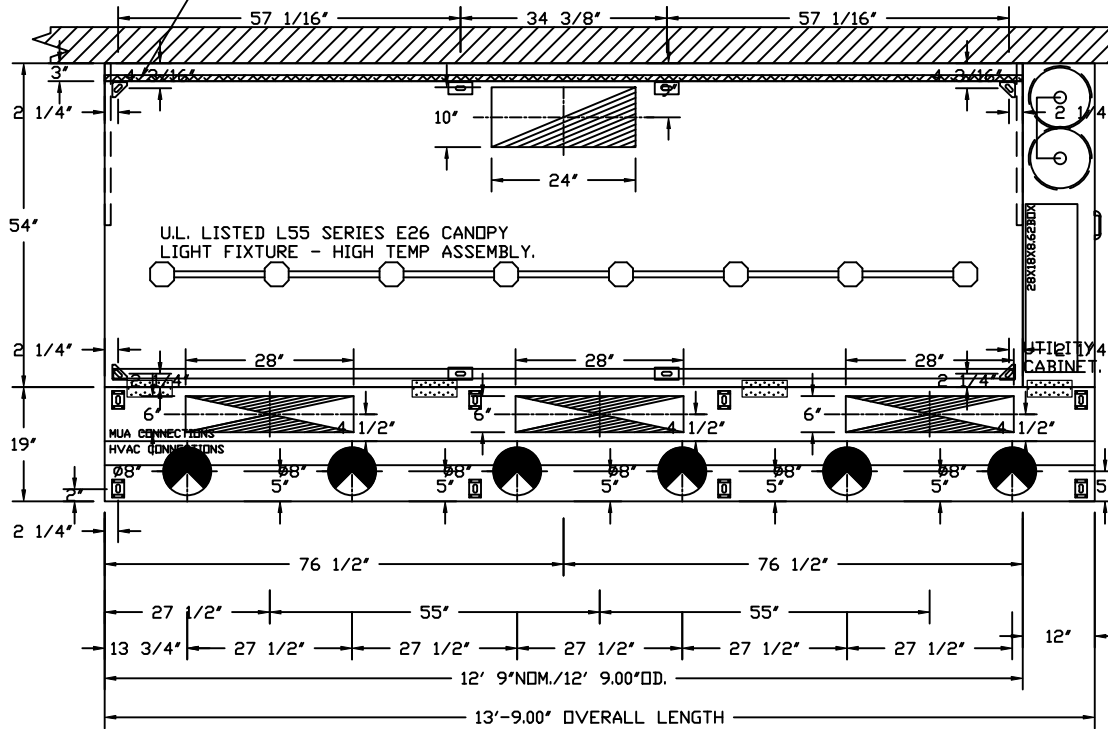


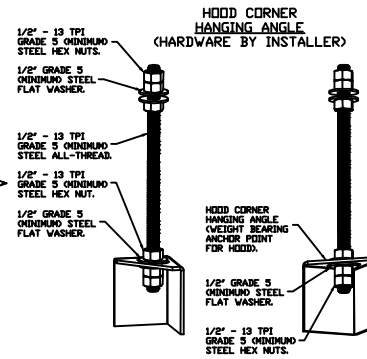


1' LAYER OF INSULATION FACTORY  
 INSTALLED IN INTERNAL BACK STANDOFF.  
 MEETS 0 INCH REQUIREMENTS FOR  
 CLEARANCE TO COMBUSTIBLE SURFACES.



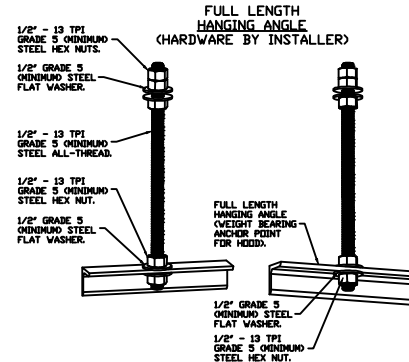
PLAN VIEW - HOOD #1  
 12' 9.00" LONG 5424ND-2-ACPSP-F  
 NOTE: ADDITIONAL HANGING ANGLES PROVIDED FOR HOODS 12' AND LONGER.

ACPSP SHIPS LOOSE FOR FIELD INSTALLATION



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

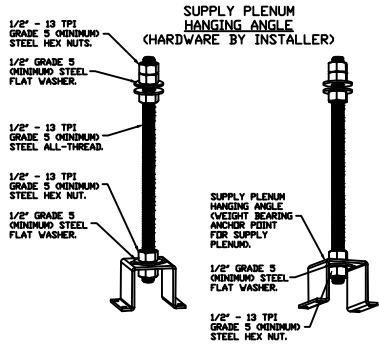


ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR FULL LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



JOBCHIPOTLE PRESERVE VILLAGE #5005	
LOCATION Eden Prairie, MN, 55347	
DATE 9/16/2024	JOB # 6758302
DWG # 2	DRAWN BY JMB-40
REV.	SCALE 3/8" = 1'-0"



**CLEARANCE TO COMBUSTIBLES**

HOODS #	SURFACE	MIN CLEARANCE
1	TOP	18"
	FRONT	0"
	BACK	0"
	LEFT	18"
	RIGHT	0"

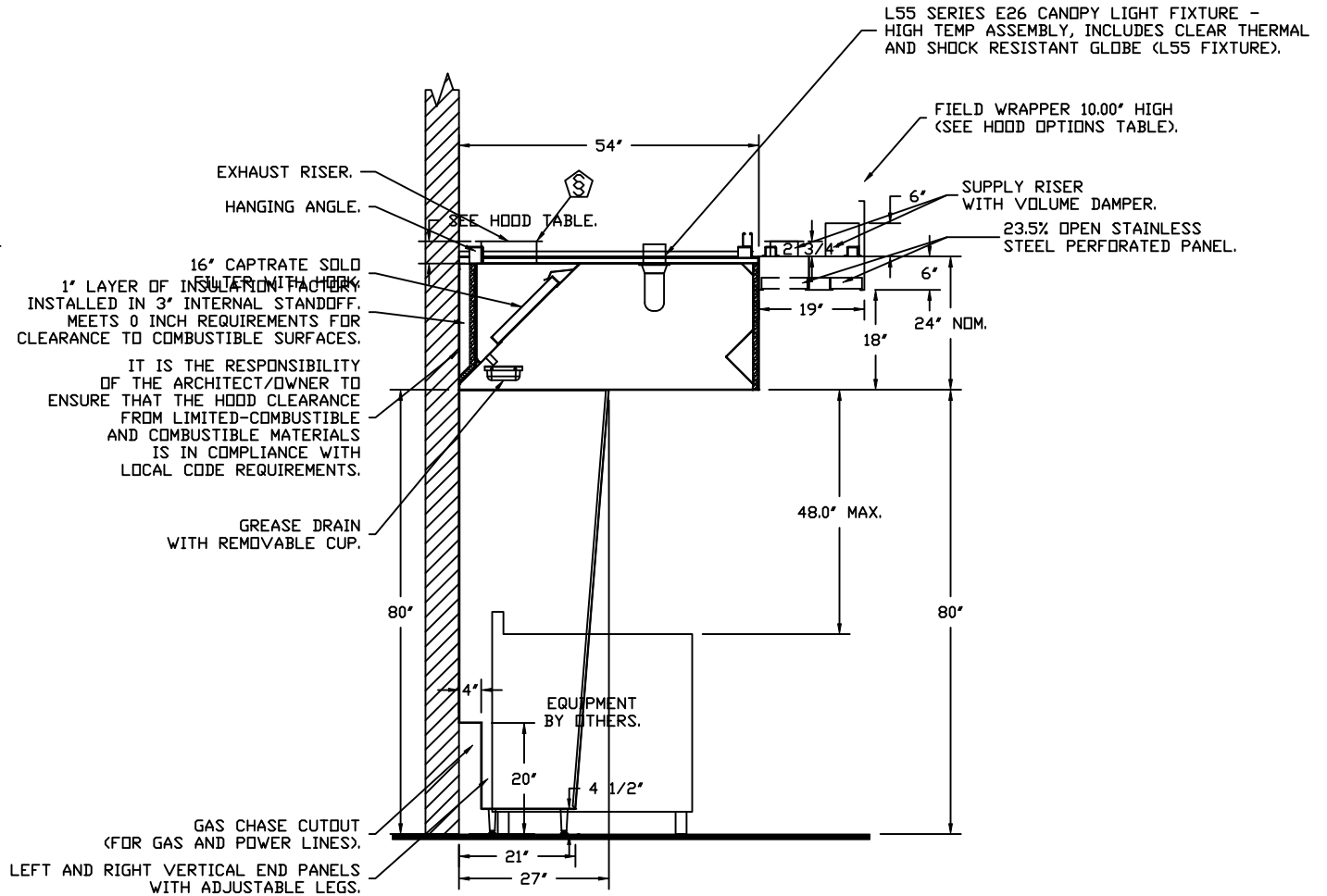
- 18" CLEARANCE TO COMBUSTIBLES CONFORMS TO UL710 STANDARD.
- HOOD MOUNTED UTILITY CABINETS REQUIRE 36" SERVICE CLEARANCE.

**ASSEMBLY INSTRUCTIONS**

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD, SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

16" CAPTRATE SOLD INSULATION FACTORY INSTALLED IN 3" INTERNAL STANDOFF. MEETS 0 INCH REQUIREMENTS FOR CLEARANCE TO COMBUSTIBLE SURFACES.

IT IS THE RESPONSIBILITY OF THE ARCHITECT/OWNER TO ENSURE THAT THE HOOD CLEARANCE FROM LIMITED-COMBUSTIBLE AND COMBUSTIBLE MATERIALS IS IN COMPLIANCE WITH LOCAL CODE REQUIREMENTS.



**SECTION VIEW - MODEL 5424ND-2-ACPSP-F  
HOOD - #1**



**CAPTIVEAIR**

JOBCHIPOTLE PRESERVE VILLAGE #5005	
LOCATION Eden Prairie, MN, 55347	
DATE 9/16/2024	JOB # 6758302
DWG # 3	DRAWN BY JMB-40
REV.	SCALE 3/8" = 1'-0"

**FIRE SYSTEM INFORMATION - JOB#6758302**

FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	
						SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0	40	32	FIRE CABINET RIGHT	RIGHT, HOOD 1

**GAS VALVE(S)**

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		SC ELECTRICAL	1.500	CAPTIVEAIRE SYSTEMS

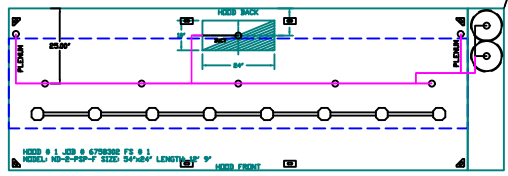
**FIRE SYSTEM PARTS LIST KEY**

FIRE SYSTEM NO	TAG	KEY NUMBER - PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
1		0 - 0 - TANK FIRE SUPPRESSION POST-DISCHARGE PROCEDURE UTILITY CABINET LABEL SHEET.	1	0
		0 - 0 - TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET.	1	0
		0 - 0 - 12-F28021-32144-DT-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. NO, CLOSE ON TEMP RISE AT 360°F. (A0034310).	1	0
		0 - 0 - 32-00002 QUIK SEAL - 1/2" (UL).	1	0
		0 - 0 - 4429K153 1/2" MALE NPT TO 1/2" FEMALE NPT ELBOW, BRASS.	2	0
		0 - 0 - 4429K422 1/2" X 1/4" BRASS REDUCING BUSHING.	1	0
		0 - 0 - 79525 1/2" 90 PRO-PRESS ELBOW WITH 1/2" NPT FEMALE CONNECTION, VIEGA.	1	0
		0 - 0 - 79580 1/2" X 1/2" PRO-PRESS TEE X 1/2" NPT FEMALE CONNECTION, VIEGA.	2	0
		0 - 0 - 87-120042-001 SECONDARY ACTUATOR VALVE (SVA) - SINGLE ACTUATOR, REQUIRES PRIMARY RELEASE ACTUATOR, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-120045-001 HOSE, SECONDARY ACTUATOR HOSE, 7.5' BRAIDED STAINLESS STEEL, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-30001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	2	0
		0 - 0 - 87-300030-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	8	0
		0 - 0 - 9055455PC PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD.	7	0
		0 - 0 - 9097200PC PRO PRESS PC611 1/2 PRESS TEE LD.	7	0
		0 - 0 - 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	4	0
		0 - 0 - A0034332 JUNCTION BOX FOR MANUAL PULL STATION. 1.5" DEEP BACK BOX, RED COLOR.	1	0
		0 - 0 - A31484 1/4" NPT SCHRADER VALVE AND CAP, JB INDUSTRIES. 1/4" FLARE X 1/4" MPT HALF UNION. USED ON TANK SERVICE PORT.	1	0
		0 - 0 - B1145 3/8" BLACK IRON 90 ELL.	3	0
		0 - 0 - DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION.	6	0
		0 - 0 - TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	2	0
		16 - 16 - 79210 1/2" X 3/8" NPT MALE ADAPTER, VIEGA.	8	0
		16 - 16 - DL-F NOZZLE - TANK PROTECTION APPLIANCE COVERAGE NOZZLE (INCLUDES METAL BLOW OFF CAP, LANYARD, USED WITH CHROME-PLATED PIPE).	8	0
		26 - 26 - QSA-3/8 QUIK SEAL - 3/8" (UL).	8	0
		34 - 34 - A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT. RED COLOR.	1	0



<b>JOB</b> CHIPOTLE PRESERVE VILLAGE #5005	
<b>LOCATION</b> Eden Prairie, MN, 55347	
<b>DATE</b> 9/16/2024	<b>JOB #</b> 6758302
<b>DWG #</b> 4	<b>DRAWN BY</b> JMB-40
<b>REV.</b>	<b>SCALE</b> 3/8" = 1'-0"

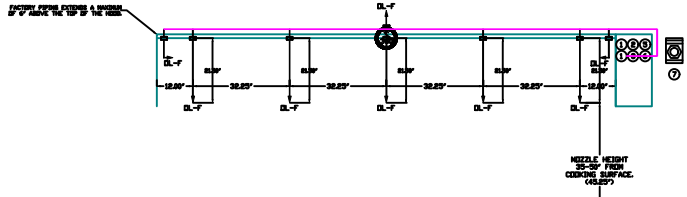
SYSTEM PROVIDES A MINIMUM OF 7 FT OF PROTECTION FOR LIGHTER FINISH HOOD AND HOOD IS GRADE OR BELOW FOR ALL APPLIANCES. HOODS SHALL BE INSTALLED TO MEET ALL APPLICABLE CODES AND REGULATIONS FOR THE PROJECT.



- NOTES**
- FIELD PIPE DROPS AS SHOWN
  - PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
  - FIELD INSTALLED DROP FACTORY WILL PROVIDE CITY 2.60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
  - SHIP LOOSE DROP FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
  - RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVEING, SALAMANDERS, ETC.
  - OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
  - IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
  - FACTORY PIPING EXTENDS A MAXIMUM OF 6' ABOVE THE TOP OF THE HOOD.
  - APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.
  - THIS FIRE SYSTEM COMPLIES WITH UL 300 REQUIREMENTS.
  - DL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS
  - JOB # 6758308
  - JOB NAME: CHIPOTLE PRESERVE VILLAGE #5005.
  - SYSTEM SIZE: TANK-SP-2 DESIGN FP: 32. MAXIMUM FP: 40.
  - HOOD # 1 IS 300" LONG X 34" WIDE X 24" HIGH.
  - RISE # 1 IS 10" X 24".
  - HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.
  - HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
  - MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

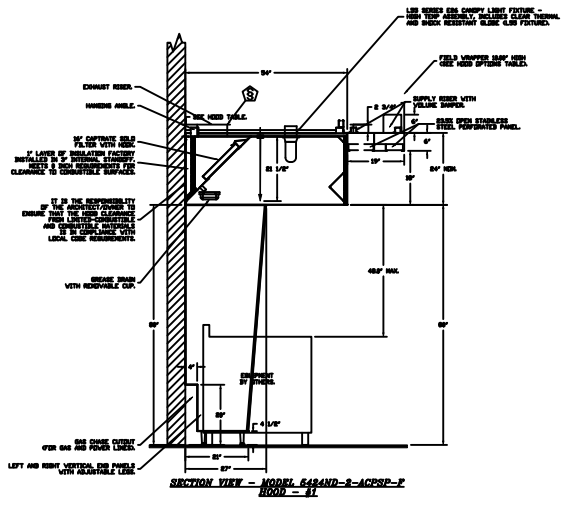
INCLUDED FIELD INSTALLATION AND MAKEUP DURING NORMAL BUSINESS HOURS BY CERTIFIED INSTALLERS ONLY IN THE LOCATION NOTES ABOVE. TWO SITE VISITS ONLY ONE VISIT TO SET PULL STATION & SYSTEM MAKEUP AND ONE VISIT FOR THE TEST. ADDITIONAL VISITS WILL RESULT IN ADDITIONAL CHARGES. THE MECHANICAL OR ELECTRICAL GAS VALVE PER SYSTEM AT A MAXIMUM SIZE OF 1/2" PIPING AND SYSTEM TEST.

EXCLUDED LABOR LABOR & PREVALUING VALVE GLANDS & WAXES WILL BE ADDED IF APPLICABLE. GAS VALVE INSTALLATION, ELECTRICAL HOODS AND CONNECTORS, HANGING OF FIRE CABINET, BRANT TRIP, HANGING OF EXTINGUISHERS, ON-SITE RE-PIPING DUE TO EQUIPMENT LAYOUT CHANGES.



**LEGEND - FIRE CABINET PUMP SYSTEM**

- 1 4 GALLON TANK
- 2 PRIMARY ACTUATOR RELEASE.
- 3 SECONDARY ACTUATOR RELEASE.
- 4 PRESSURE SUPERVISION SWITCH.
- 5 PRIMARY HOSE ASSEMBLY.
- 6 SECONDARY HOSE ASSEMBLY.
- 7 REMOTE MANUAL ACTUATION DEVICE.



JOB: CHIPOTLE PRESERVE VILLAGE #5005	
LOCATION: Eden Prairie, MN, 55347	
DATE: 9/16/2024	JOB #: 6758302
DWG #: 5	DRAWN BY: JMB-40
REV.	SCALE: 3/16" = 1'-0"

**GAS VALVES AND STRAINERS**

GAS VALVE FOR FS#1	GAS VALVE SIZING						GAS VALVE DIMENSIONS					INSTALLATION	PART NUMBERS			
	TYPE	SIZE	VOLTAGE	MIN. INLET PRESSURE	MAX. INLET PRESSURE	FLOW AT 1 IN.W.C. DROP NATURAL GAS	FLOW AT 1 IN.W.C. DROP PROPANE	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "G"	MOUNTING ORIENTATION	GAS VALVE PART NUMBER	STRAINER PART NUMBER
ELECTRICAL	1-1/2"	24 VDC	0 PSI (0 IN.W.C.)	5 PSI (138 IN.W.C.)	2,406,000 BTU/HR	1,561,219 BTU/HR	7-5/8"	6-3/8"	5-3/4"	6-3/16"	14-1/8"	12-5/16"	HORIZONTAL	8214275-24VDC	4417K67	

**ELECTRIC GAS VALVES ONLY:**

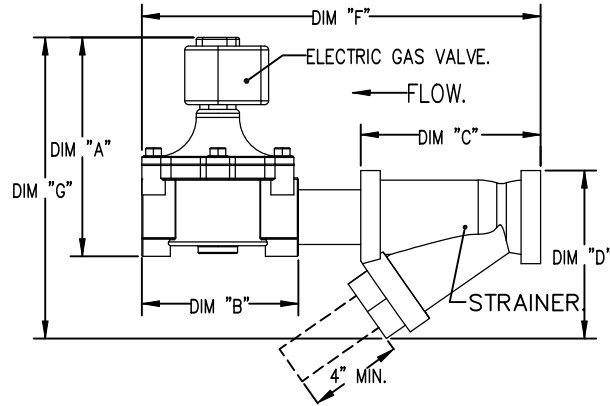
3/4"-2" 120VAC GAS VALVES CAN BE MOUNTED WITH THE SOLENOID IN ANY POSITION ABOVE HORIZONTAL.  
 2 1/2"-3" 120VAC GAS VALVES MUST BE MOUNTED WITH THE SOLENOID VERTICAL AND UPRIGHT.  
 24VDC GAS VALVES MUST BE MOUNTED WITH THE SOLENOID VERTICAL AND UPRIGHT.

**ALL GAS VALVES/STRAINERS**

PROPER CLEARANCE MUST BE PROVIDED IN ORDER TO SERVICE THE STRAINERS A MINIMUM OF 4" CLEARANCE DISTANCE MUST BE PROVIDED AT THE BASE OF THE STRAINER CUSTOMER MUST VERIFY BTU CONSUMPTION AS WELL AS PRESSURE RATING SPECIFIC GRAVITY OF NATURAL GAS = 0.64, SPECIFIC GRAVITY OF LP = 1.52.

**CALCULATIONS**

TO CALCULATE GAS FLOW FOR OTHER THAN 1 IN.W.C. PRESSURE DROP  
 NEW BTU/HR = (BTU/HR AT 1 IN.W.C. PRESSURE DROP) X NEW PRESSURE DROP<sup>0.85</sup>  
 TO CALCULATE GAS FLOW FOR OTHER THAN 0.64 SPECIFIC GRAVITY  
 NEW BTU/HR = (BTU/HR AT 0.64) X (0.64 / NEW SPECIFIC GRAVITY)<sup>0.85</sup>



**CAPTIVEAIR**

<b>JOB</b> CHIPOTLE PRESERVE VILLAGE #5005	
<b>LOCATION</b> Eden Prairie, MN, 55347	
<b>DATE</b> 9/16/2024	<b>JOB #</b> 6758302
<b>DWG #</b> 6	<b>DRAWN BY</b> JMB-40
<b>REV.</b>	<b>SCALE</b> 3/8" = 1'-0"

**EXHAUST FAN INFORMATION - JOB#6758302**

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SDNES
1	EF-1	1	DUI80HFA	CAPTIVEAIRE	2550	1.450	1235	DDP,PREMIUM	2.000	1.2790	3	208	7.2	589 FPM	215	17.2
2	EF-2	1	DR12HFA	CAPTIVEAIRE	150	0.600	1304	TEAD-ECM	0.250	0.0950	1	115	2.9		50	6.3

**MUA FAN INFORMATION - JOB#6758302**

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	MCA	MOCP	WEIGHT (LBS)	SDNES
3	MAU-1	1	A1-D.250-15D	15MF-1-MDD	A1-D.250	1000	1300	0.500	1555	DDP,PREMIUM	1.000	0.5630	3	208	3.1	3.9A	15A	508	12.3

**GAS FIRED MAKE-UP AIR UNIT(S)**

FAN UNIT NO	TAG	INPUT BTUs	OUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%)
3	MAU-1	146965	135208	100°F	7 IN. W.C. - 14 IN. W.C.	NATURAL	92

**FAN OPTIONS**

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF-1	1	GREASE BDX
		1	REMOVE HINGE KIT LABEL FROM THE FAN BASE
		1	UPBLAST FAN WHEEL ACCESS PORT
		1	2 YEAR PARTS WARRANTY
2	EF-2	1	I 12-BDD DAMPER
		1	ECM WIRING PACKAGE - MANUAL DR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCD MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY
3	MAU-1	1	SIZE 1 TEMPERED COMMERCIAL DOWN DISCHARGE FOR DIRECT DRIVE AHUS
		1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC
		1	SHIP LOOSE GAS STRAINER 3/4"
		1	MOTORIZED BACKDRAFT DAMPER FOR A1-D HOUSING - MEETS AMCA CLASS 1A RATING
		1	FREEZE STAT
		1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY
		1	2 YEAR PARTS WARRANTY
1	EXTERIOR GAS CONNECTION PROVIDED BY FACTORY WITH QUICK SEAL AND ANTI-ROTATION BRACKET		

**FAN ACCESSORIES**

FAN UNIT NO	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	EF-1	YES						
2	EF-2		YES					
3	MAU-1						YES	

**CURB ASSEMBLIES**

NO	DN FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF-1	39 LBS	CURB	26.500"W X 26.500"L X 20.000"H VENTED.
2	# 2	EF-2	31 LBS	CURB	17.500"W X 17.500"L X 26.000"H.
3	# 3	MAU-1	65 LBS	CURB	21.000"W X 71.000"L X 20.000"H INSULATED.

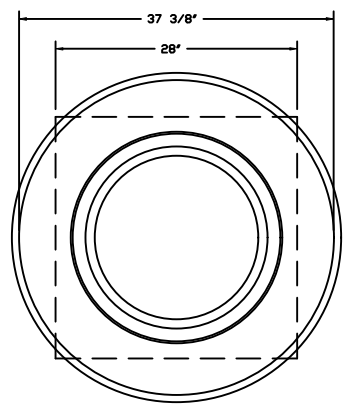
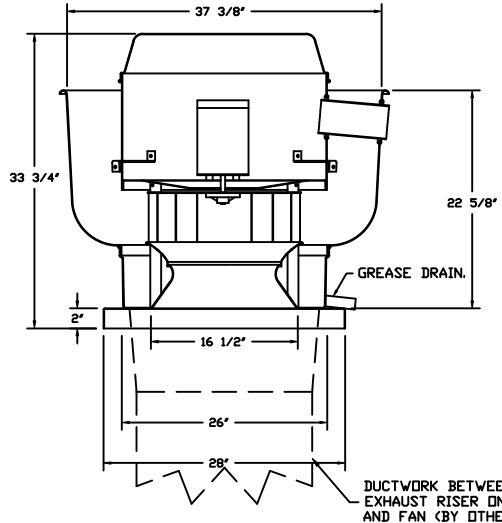
**HMI SCHEDULE**

UNIT NUMBER	HMI #	HMI LOCATION	TEMP AVERAGING	MODBUS ADDRESS
FAN #3	HMI #1 - UNIT	IN UNIT	NOT AVERAGED	55



<b>JOB</b> CHIPOTLE PRESERVE VILLAGE #5005	
<b>LOCATION</b> Eden Prairie, MN, 55347	
<b>DATE</b> 9/16/2024	<b>JOB #</b> 6758302
<b>DWG #</b> 7	<b>DRAWN BY</b> JMB-40
<b>REV.</b>	<b>SCALE</b> 3/8" = 1'-0"

FAN #1 DU180HFA - EXHAUST FAN (EF-1)



TOP VIEW

**FEATURES:**

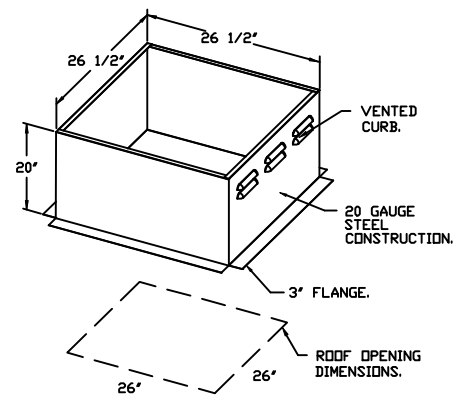
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

**NORMAL TEMPERATURE TEST**  
 EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**ABNORMAL FLARE-UP TEST**  
 EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

**OPTIONS**

- GREASE BOX.
- REMOVE HINGE KIT LABEL FROM THE FAN BASE.
- UPBLAST FAN WHEEL ACCESS PORT.
- 2 YEAR PARTS WARRANTY.



JOB CHIPOTLE PRESERVE VILLAGE #5005	
LOCATION Eden Prairie, MN, 55347	
DATE 9/16/2024	JOB # 6758302
DWG # 8	DRAWN BY JMB-40
REV.	SCALE 3/8" = 1'-0"

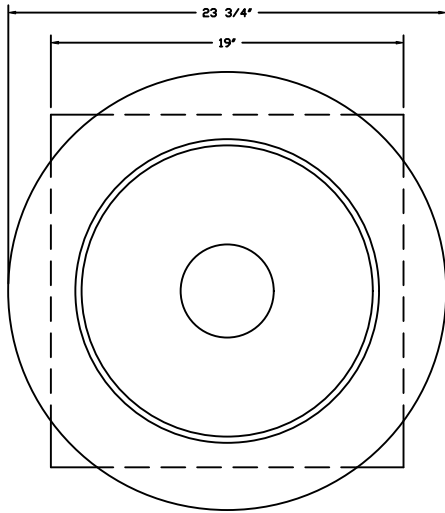
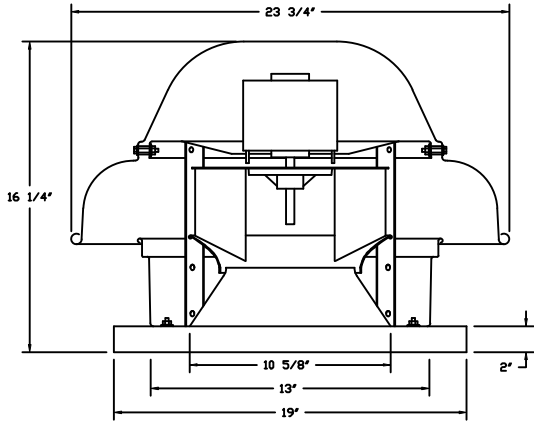
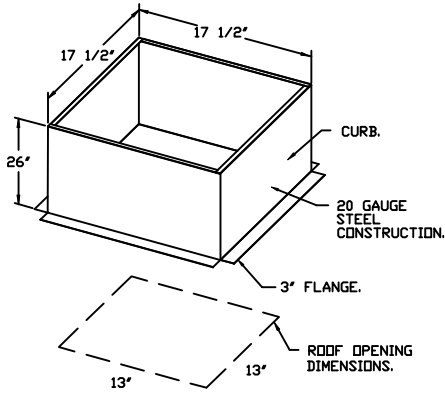
FAN #2\_DR12HFA - EXHAUST FAN (EF-2)

**FEATURES:**

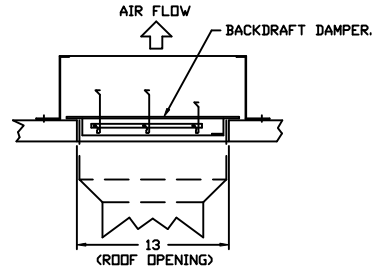
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- UL705.
- SAFETY DISCONNECT.
- STANDARD BIRD SCREEN.
- SPEED CONTROL.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).

**OPTIONS**

- 1 12-BDD DAMPER.
- ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCO MOTOR), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.



**BACKDRAFT DAMPER INSTALLATION**



**TOP VIEW**

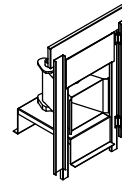
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		LOCATION Eden Prairie, MN, 55347	
		DATE 9/16/2024	JOB # 6758302
		DWG # 9	DRAWN BY JMB-40
		REV.	SCALE 3/8" = 1'-0"

- FAN 83 AI-2826-1SD - HEATER OAU-1
1. DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 15" HOLED FLOW DIRECT DRIVE FAN.
  2. INTAKE HOOD WITH 12 FILTERS.
  3. DOWN DISCHARGE AIR FLOW RIGHT -> LEFT.
  4. DOWN DISCHARGE CONSTRUCTION FOR SIZE 1 DIRECT DRIVE AHUS.
  5. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE.
  6. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE.
  7. SHIP LODGE GAS STRAINER, TO BE INSTALLED UPSTREAM OF UNIT CONNECTION, 3/4" CONNECTION.
  8. MOTORIZED BACK DRAFT DAMPER 16" X 16" FOR SIZE 1 STANDARD & MODULAR HEATER UNITS V/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, TFRIGS ACTUATOR INCLUDED.
  9. FREEZE/STAT.
  10. SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS, OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREVIRE PANEL OR WITH DCV PACKAGE, PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO MAIN SWITCH.
  11. HOUSED DOUBLE WALL INSULATED DUCT ASSEMBLY (BURNER/BLOWER SECTION).
  12. EXTERIOR GAS CONNECTION PROVIDED BY FACTORY WITH QUICK SEAL AND ANTI-ROTATION BRACKET.
  13. 2 YEAR PARTS WARRANTY.

NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMASHA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 206. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT, SYSTEM EFFECT WILL DRAMATICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 14" X 14".

SUPPLY SIDE HEATER INFORMATION

WINTER TEMPERATURE = -30°F. TEMP. RISE = 100°F.  
 BTUH CALCULATED OFF ACTUAL AIR DENSITY.  
 OUTPUT BTUH AT ALTITUDE OF 60 FT. = 140195.  
 INPUT BTUH AT ALTITUDE OF 60 FT. = 152386.  
 OUTPUT BTUH AT ALTITUDE OF 999 FT. = 132008.  
 INPUT BTUH AT ALTITUDE OF 999 FT. = 146963.



DIRECT FIRED (DF) PROFILE PLATE ASSEMBLY

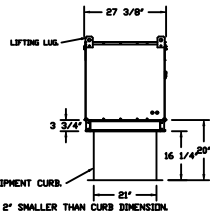
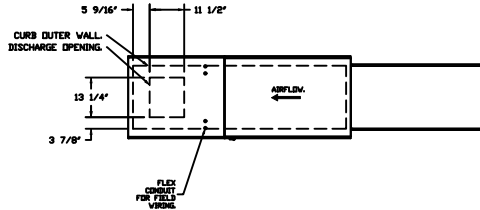
DIRECT FIRED PROFILE PLATE SPECIFICATIONS:

**DESCRIPTION:**  
 DIRECT FIRED BURNERS SHALL HAVE PATENTED US PATENT NO. US6495282B2, SELF-ADJUSTING PROFILE PLATES SHALL ALLOW BURNERS TO ACHIEVE CLEAN COMBUSTION BY LIMITING BY-PRODUCT LEVELS TO A MAXIMUM OF 0.5PPM OF CARBON MONOXIDE (CO), AND 0.5PPM OF NITROGEN DIOXIDE. GAS-DIRECT FIRED UNITS SHALL BE CONFIGURED WITH THE BLOWER MOUNTED DOWNSTREAM OF THE BURNER. THIS ARRANGEMENT WILL ENSURE A CONSISTENT AIRFLOW, REGARDLESS OF INLET AIR TEMPERATURE.

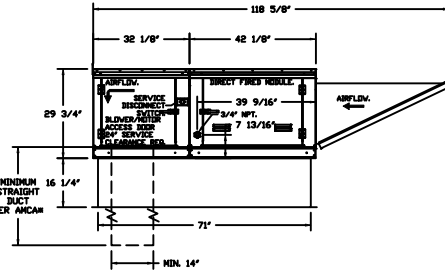
**APPLICATION:**  
 SPRING-LOADED BURNER PROFILE PLATES ARE ENGINEERED TO AUTOMATICALLY REACT TO THE MOMENTUM OF A FRESH AIR STREAM, WITHOUT THE NEED FOR ANY MOTORS OR ACTUATORS TO MECHANICALLY ADJUST THEM. WITH THIS FEATURE, ALL DF UNITS ARE DESIGNED FOR DEMAND CONTROL VENTILATION (DCV) REQUIREMENTS.

**CERTIFICATIONS:**  
 ALL PROFILE PLATE ASSEMBLIES SHALL BE INCLUDED IN THE DF UNITS' ETL LISTING AND COMPLY WITH COMBINED SAFETY STANDARDS ANSI Z83.4 AND CSA 3.7 (DGN-RECIRCULATING DF HEATERS) AND ANSI Z83.18 (RECIRCULATING DF HEATERS).

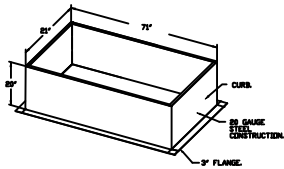
**GENERAL CONSTRUCTION:**  
 -PROFILE PLATES SHALL BE FINISHED FROM G90 GALVANIZED STEEL.  
 -PROFILE PLATES SHALL VARY IN SIZE PER UNIT.  
 -PROFILE PLATES SHALL BE MOUNTED ALONG THE SAME PLANE AS THE DISCHARGE OF THE BURNER.  
 -DESIGN SHALL INCORPORATE PROPERLY TORQUED, PERMANENTLY MOUNTED SPRING HINGES.  
 -SPRING HINGES SHALL BE MADE FROM PLATED STEEL.



ROOF OPENING 2" SMALLER THAN CURB DIMENSION.



OPTIONS - FULL BOTTOM CORNERS.



JOB: CHIPOTLE PRESERVE VILLAGE #5005	
LOCATION: Eden Prairie, MN, 55347	
DATE: 9/16/2024	JOB #: 6758302
DWG #: 10	DRAWN BY: JMB-40
REV.	SCALE: 3/16" = 1'-0"

# Exhaust Fan Wiring

JOB 6758302 - CHIPOTLE PRESERVE VILLAGE #50...

DRAWING NUMBER EXH6758302-1

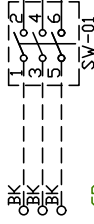
SHIP DATE 9/16/2024

MODEL DU180HFA

Installed Options

1

2



Label	Component Description	Location
MT-01	Fan Motor	[3]
SV-01	Main disconnect switch	[3]

MT-01 Fan Motor [3]

SV-01 Main disconnect switch [3]

EXHAUST MOTOR INFO  
 20HP-208V-3P-7.2FLA  
 VFD PART: ESV222N02YXB571

ELECTRICAL INFORMATION  
 MOTOR/CTRL MCA: 90A  
 MOTOR/CTRL MOP: 15A

NOTES  
 --- DENOTES FIELD WIRING  
 --- DENOTES INTERNAL WIRING

WIRE COLOR  
 BK - BLACK YW - YELLOW  
 BL - BLUE GR - GREEN  
 BR - BRDWN GY - GRAY  
 OR - ORANGE PR - PURPLE  
 RD - RED PK - PINK  
 WH - WHITE

23

# Exhaust Fan Wiring

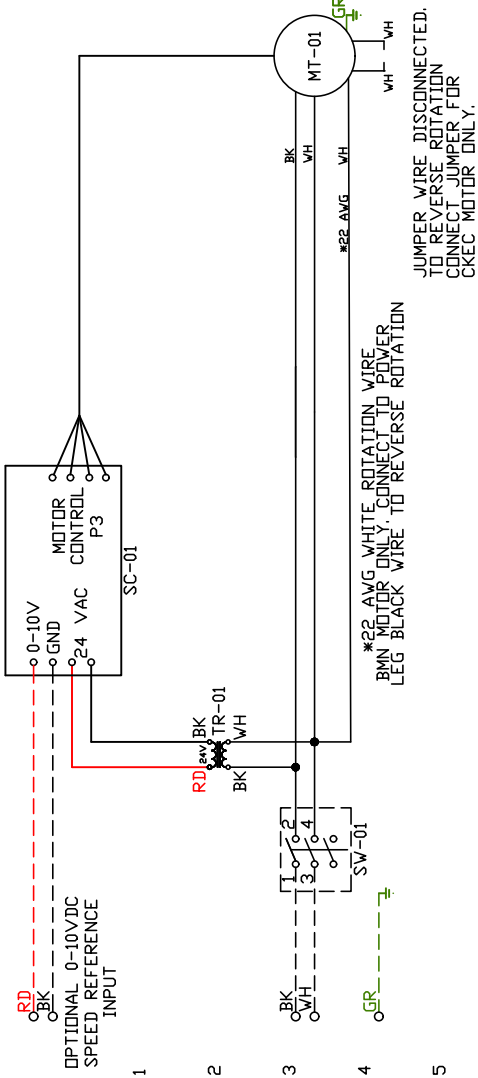
JOB 6758302 - CHIPOTLE PRESERVE VILLAGE #50...

DRAWING NUMBER EXH6758302-2

SHIP DATE 9/16/2024

MODEL DR12HFA

Installed Options

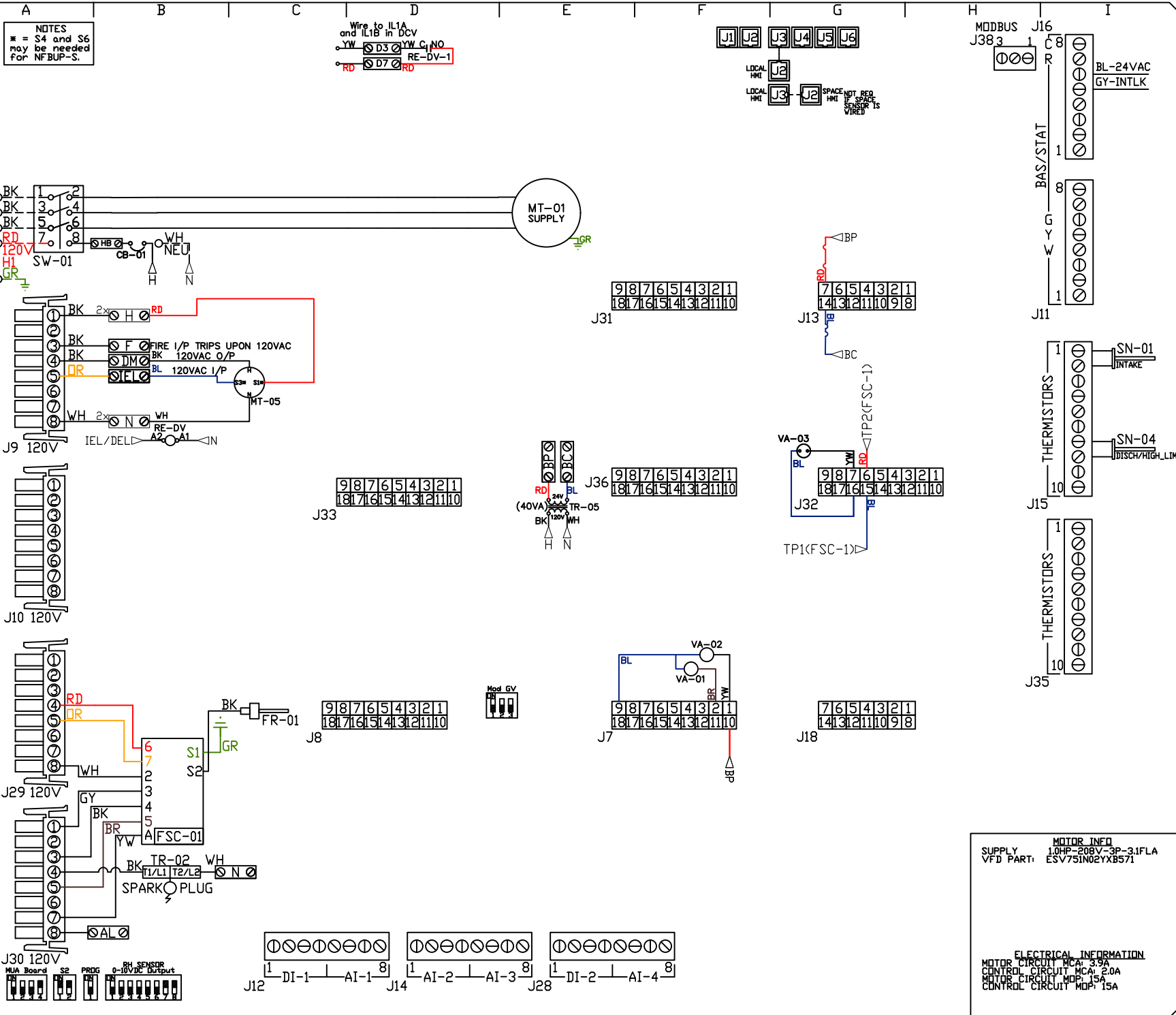


Label	Component Description	Location
MT-01	Fan Motor	[3]
SC-01	RTC-FSC-1	[1]
SW-01	Main disconnect switch	[3]
TR-01	24VAC 20VA Transformer	[2]

EXHAUST MOTOR INFO  
0.3HP-115V-1P-2.9FLA

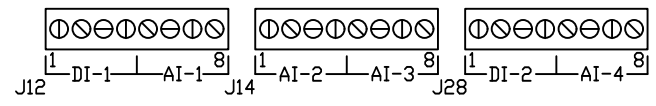
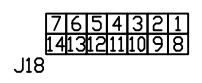
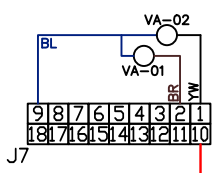
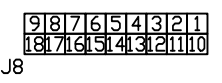
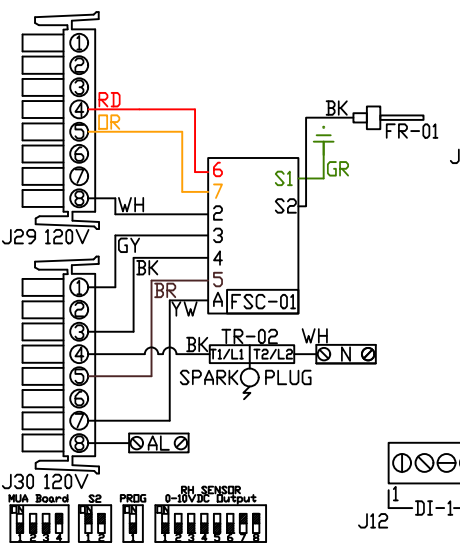
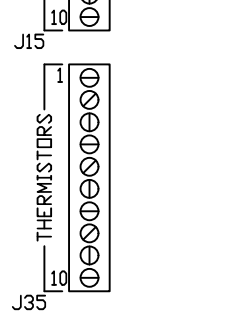
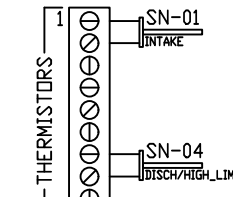
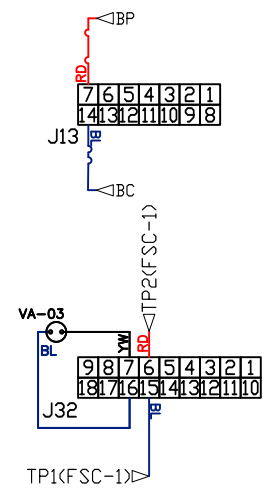
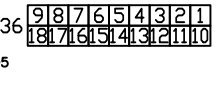
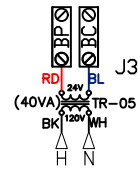
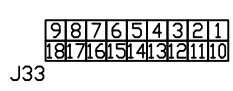
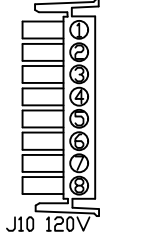
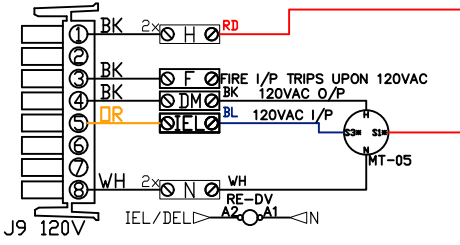
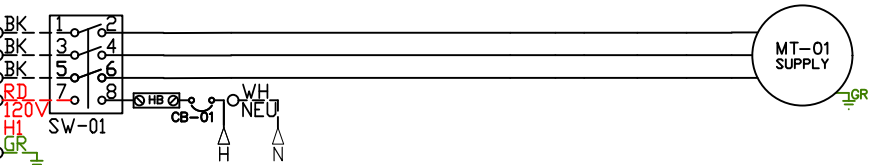
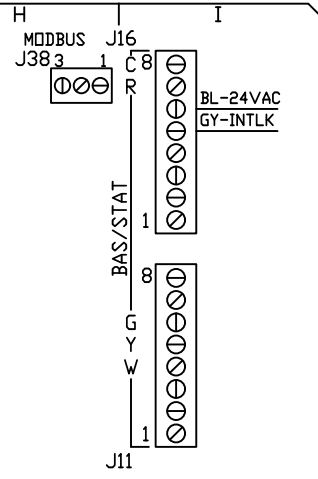
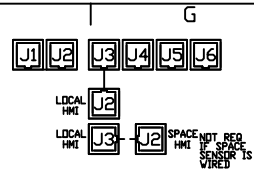
ELECTRICAL INFORMATION  
MOTOR/CTRL MOD: 3YA  
MOTOR/CTRL MOD: 15A

- NOTES
- DENOTES FIELD WIRING
  - \_\_\_ DENOTES INTERNAL WIRING
- WIRE COLOR
- BK - BLACK
  - BL - BLUE
  - BR - BRDWN
  - OR - ORANGE
  - RD - RED
  - WH - WHITE
  - YW - YELLOW
  - GR - GREEN
  - GY - GRAY
  - PR - PURPLE
  - PK - PINK



**NOTES**  
 \* = S4 and S6 may be needed for NFBUP-S.

Wire to IL1A and IL1B in DCV  
 YW D3 YW C1 NO  
 RD D7 RD



**MOTOR INFO**  
 SUPPLY 1.0HP-208V-3P-3.1FLA  
 VFD PART: ESV75IN02YXB571

**ELECTRICAL INFORMATION**  
 MOTOR CIRCUIT MCA: 3.9A  
 CONTROL CIRCUIT MCA: 2.0A  
 MOTOR CIRCUIT MOP: 15A  
 CONTROL CIRCUIT MOP: 15A

COMPONENT LIST	
LABEL	DESCRIPTION
CB-01	CIRCUIT_BREAKER B3
FR-01	EVD/ECM-ACU-SLI-MP B6
FSC-01	FIREYE_FLAME_SAFETY B6
MT-01	SUPPLY_MOTOR E3
MT-05	INTAKE_DAMPER_MTR C4
RE-DV	DCV_RELAY B5/D1
SN-XX	TEMP_SENSOR 14/15/16/17
SV-01	DISCONNECT_SWITCH A3
TR-02	IGNITION_TRANSFMR B9
TR-05	BOARD_POWER_TRFMR E5
VA-01	PILOT_GAS_VALVE F7
VA-02	MAIN_GAS_VALVE F7
VA-03	MOD_GAS_VALVE G5

LEGEND	
---	FIELD WIRING
---	FACTORY WIRING
BK-	BLACK
BL-	BLUE
BR-	BROWN
DR-	DRAKES
WH-	WHITE
DR/BL-	DR/BL STRIPE
BL/RD-	BL/RD STRIPE
RD/GN-	RD/GN STRIPE
WH/BL-	WH/BL STRIPE
YW-	YELLOW
GY-	GREY
PR-	PURPLE
RD-	RED
GR-	GREEN

JOB NAME CHIPOTLE PRESER...	
DRAWING TITLE	
DESCRIPTION OF OPERATION (DETAILS TO FOLLOW)	
JOB NO 6758302	DRAWN BY AUTO
TYPE FACTORY	DATE 9/16/2024
DWG: HW6758302-3	

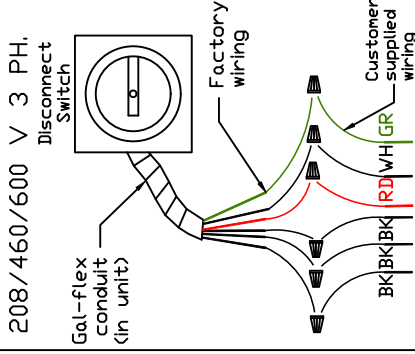
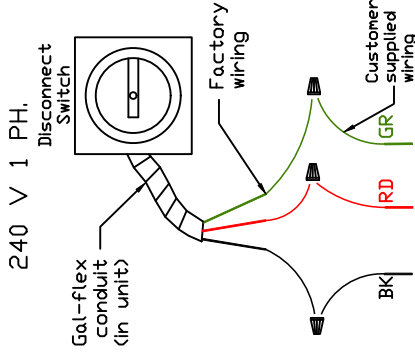
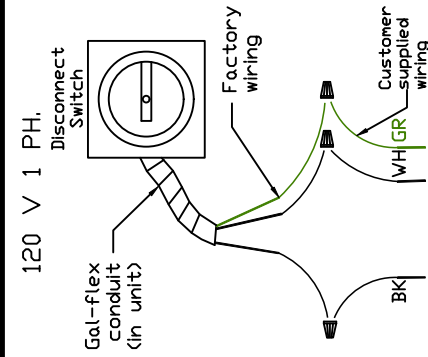
# Installation Wiring

JOB 6758302 - CHIPOTLE PRESERVE VILLAGE #50..

DRAWING NUMBER RP6758302-3

SHIP DATE 9/16/2024

MODEL AI-D.250-15D

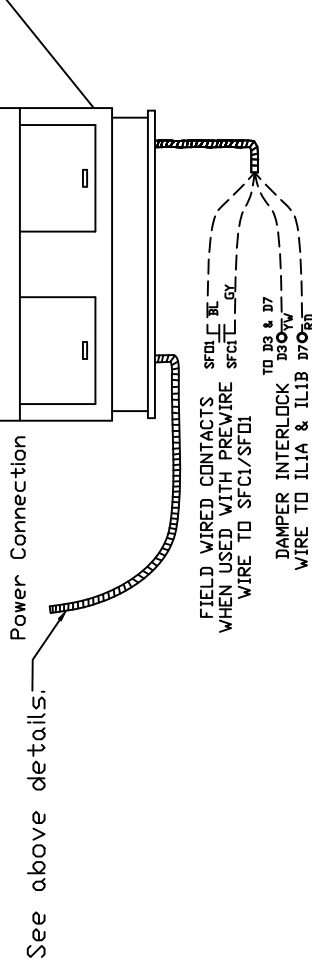


STANDING POWER  
RD & WH Wire (115V, 1 PHASE)  
OPTIONAL FOLLOW FAN  
SCHEMATICS

Installed Options

Field Wired Switch

UNIT NUMBER		FAN #3		FMI SCHEDULE		FMI LOCATION		TEMP AVERAGING		ADDRESS	
UNIT #3	FAN #3	FMI #1 - UNIT	FMI #1 - UNIT	IN UNIT	IN UNIT	TEMP AVERAGING	TEMP AVERAGING	ADDRESS	ADDRESS	NOT AVERAGED	NOT AVERAGED
											55



NOTES

WIRE COLOR

BK - BLACK  
BL - BLUE  
BR - BROWN  
DR - DRANGE  
RD - RED  
YV - YELLOW  
GR - GREEN  
GY - GRAY  
PR - PURPLE  
PK - PINK  
WH - WHITE

**ELECTRICAL PACKAGE – JOB#6758302**

NO	TAG	PACKAGE #	SWITCHES		OPTION	FANS CONTROLLED					
			LOCATION	QUANTITY		FAN TAG	TYPE	φ	HP	VOLT	FLA
1		SC-311110MA	UTILITY CABINET RIGHT	1 LIGHT	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EF-1	EXHAUST	3	2.000	208	7.2
			HOOD # 1	1 FAN		MAU-1	SUPPLY	3	1.000	208	3.1

  	<b>CAPTIVEAIR</b>		<i>JOB</i> CHIPOTLE PRESERVE VILLAGE #5005		
			<i>LOCATION</i> Eden Prairie, MN, 55347		
			<i>DATE</i> 9/16/2024	<i>JOB #</i> 6758302	
			<i>DWG #</i> 15	<i>DRAWN BY</i> JMB-40	
			<i>REV.</i>	<i>SCALE</i> 3/8" = 1'-0"	

**JOB NO**  
6758302

**MODEL NUMBER**  
SC-31110MA

**DRAWN BY**

**SCHEMATIC TYPE**  
INSTALL

**DESCRIPTION OF OPERATION:**  
3 Phase w/ control for 1 Exhaust Fan, 1 Supply Fan, Exhaust on in Fire, Lights out in Fire, Relay On/Off with Supply Fan, Fans On/Off Thermostatically Controlled, Room temperature sensor shipped loose for field installation, INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD.

**JOB NAME**  
CHIPOTLE PRESERVE VILLAGE #50...

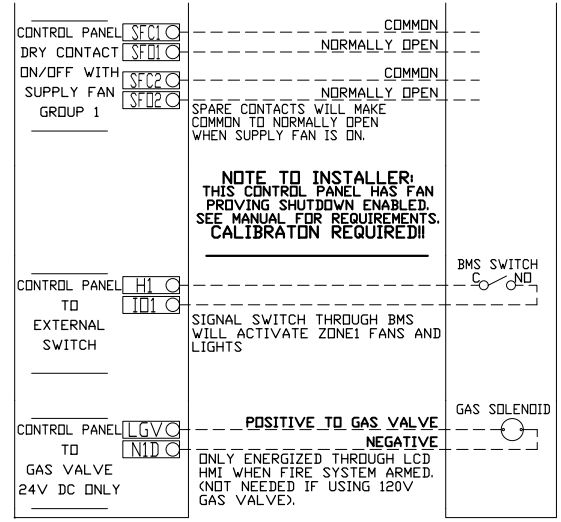
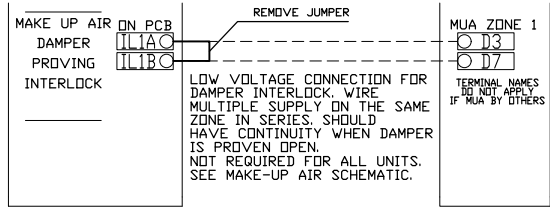
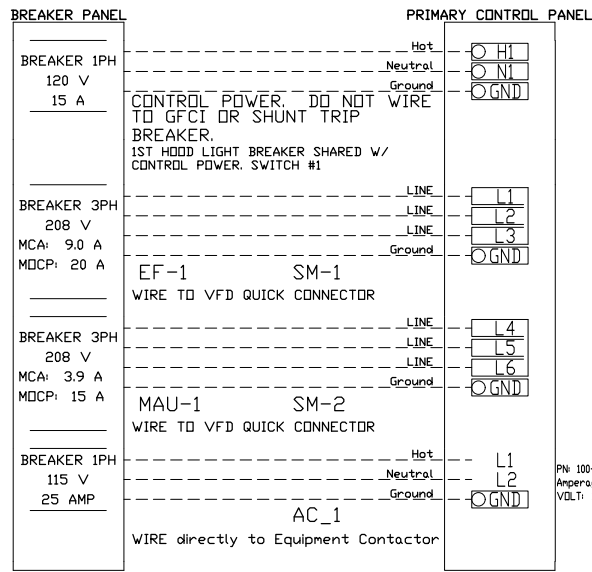
**DATE**  
9/16/2024

**DWG NO**  
ECP #1-1

**BREAKER PANEL TO PRIMARY CONTROL PANEL**

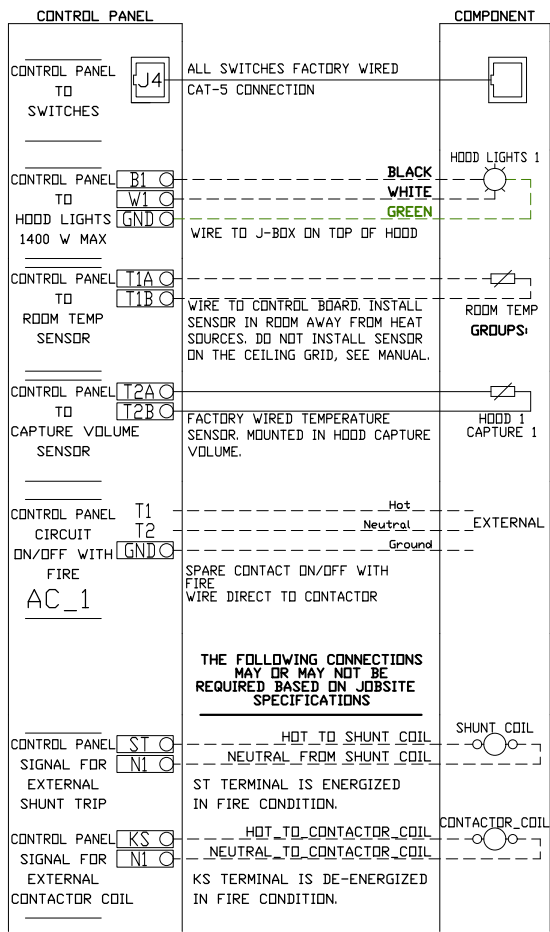
Responsibility: Electrician

BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED



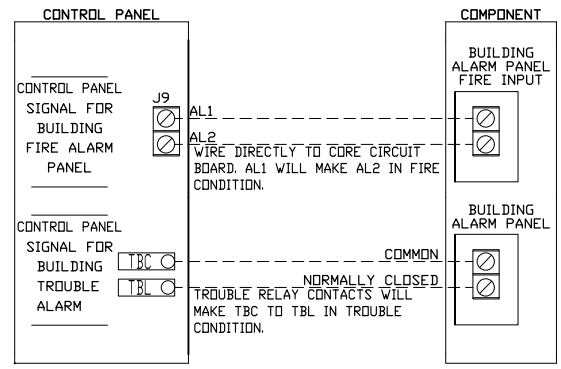
**CONTROL PANEL TO ACCESSORY ITEMS**

Responsibility: Electrician



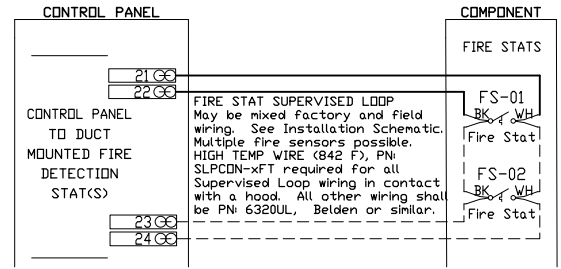
**CONTROL PANEL TO FIRE SYSTEM**

Responsibility: ALARM CONTRACTOR



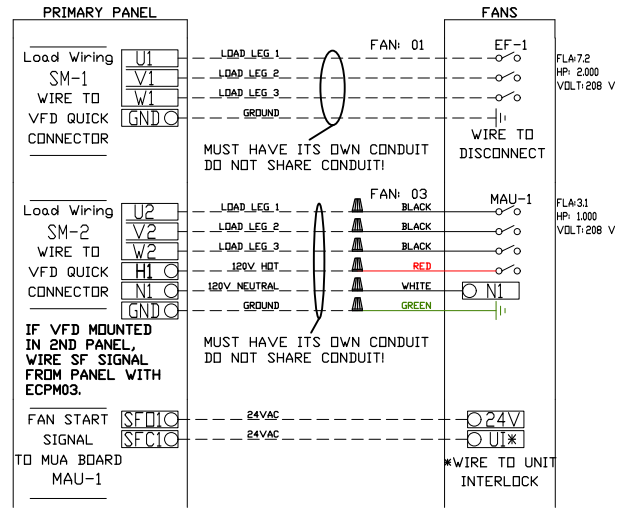
**CONTROL PANEL TO FIRE SYSTEM**

Responsibility: CERTIFIED INSTALLER



**CONTROL PANEL TO FANS**

Responsibility: Electrician



JOB NO  
6758302

MODEL NUMBER  
SC-311110MA

DRAWN BY

SCHEMATIC TYPE  
INSTALL

DESCRIPTION OF OPERATION:

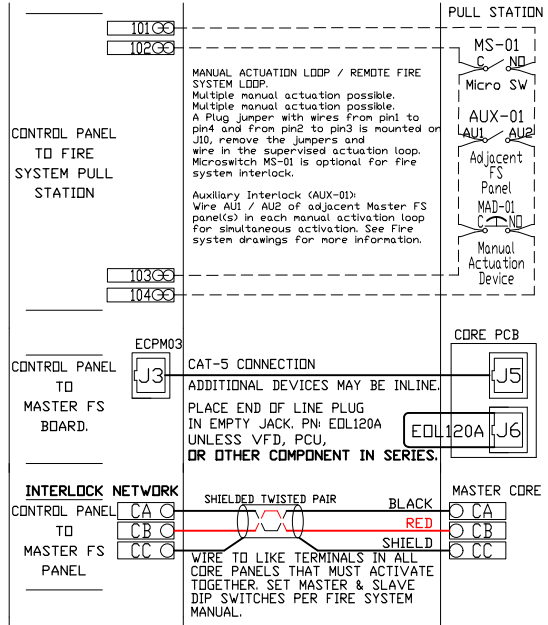
3 Phase w/ control for 1 Exhaust Fan, 1 Supply Fan, Exhaust on In Fire, Lights out in Fire, Relay On/Dff with Supply Fan, Fans On/Dff Thermostatically Controlled, Room temperature sensor shipped loose for field installation. INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD.

JOB NAME  
CHIPOTLE PRESERVE VILLAGE #50...

DATE  
9/16/2024

DWG NO  
ECP #1-2

1  
2  
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23  
24



JOB NO  
6758302

MODEL NUMBER  
SC-311110MA

JOB NAME  
CHIPOTLE PRESERVE VILLAGE #50...

DRAWN BY  
DATE  
9/16/2024

SCHEMATIC TYPE  
INSTALL

DWG NO  
ECP #1-3

DESCRIPTION OF OPERATION:  
Fire System #1 TANK FS - 4.0/4.0.

# TANK PROTECTION ELECTRICAL DETAIL

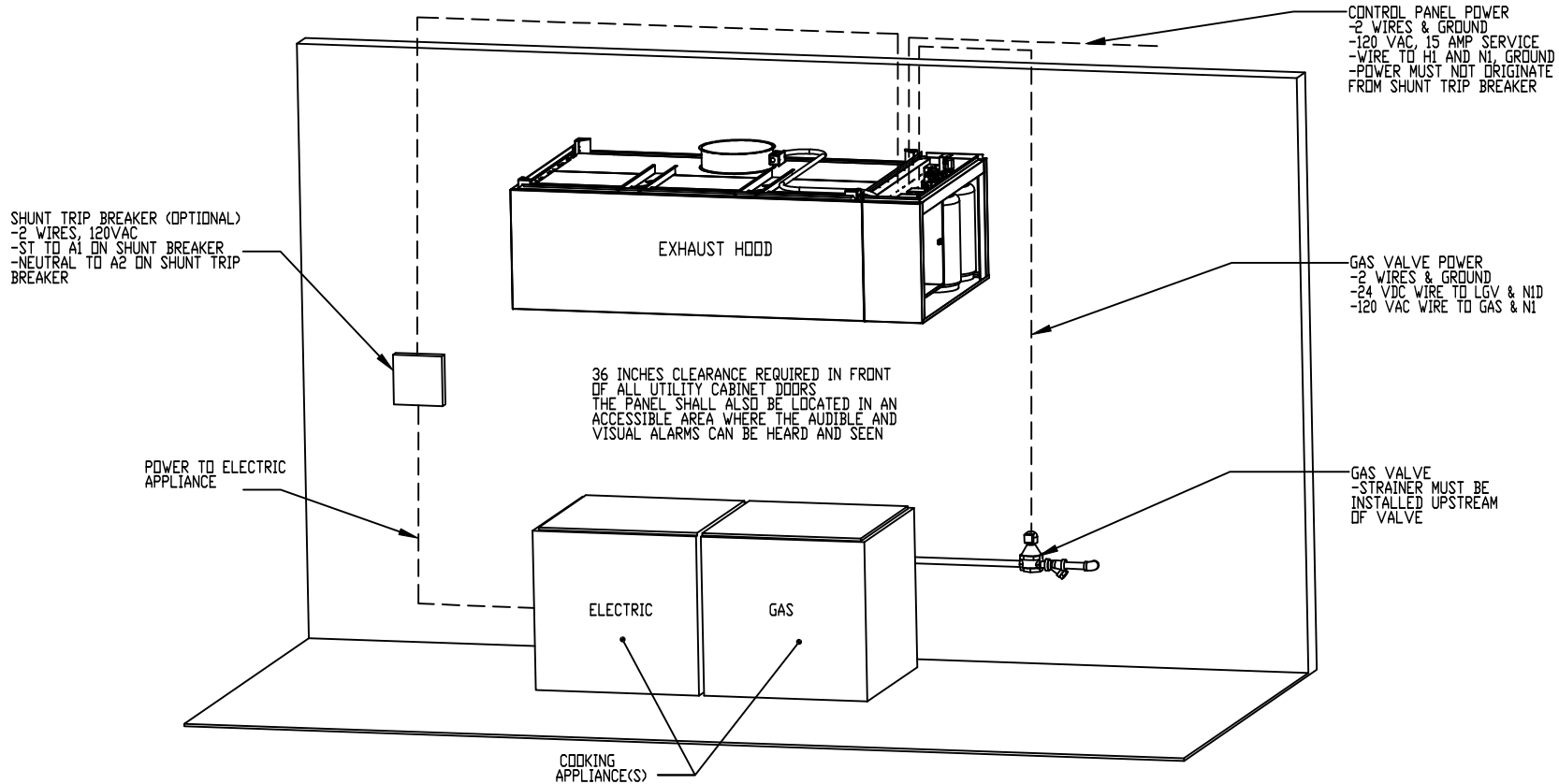
02/10/2021 Rev. 2

- ELECTRICIAN:
1. WIRE MAIN CONTROL PANEL PER INCLUDED SCHEMATIC
  2. WIRE ALL FANS PER INCLUDED SCHEMATIC
  3. WIRE SHUNT TRIP BREAKER (OPTIONAL)
  4. WIRE UDS APPLIANCE KILL SWITCH, IF EQUIPPED (OPTIONAL)
  5. WIRE GAS VALVE

FS-1: MASTER

## ELECTRICAL CONTRACTOR REQUIREMENT

ITEM	CONNECTION IN PANEL	CONNECTION IN DEVICE	VOLTAGE	AMPERAGE	COMMENTS
SHUNT TRIP BREAKER (OPTIONAL)	ST & N1	BREAKER COIL (A1 & A2)	120 VAC	< 4 AMPS	ST TO A1 ON SHUNT BREAKER COIL, AND NEUTRAL TO A2 ON SHUNT TRIP BREAKER COIL
CONTROL PANEL POWER	H1 & N1 + GROUND	CIRCUIT BREAKER	120 VAC	15 AMPS	CONTROL PANEL POWER MUST NOT BE RUN THROUGH SHUNT TRIP BREAKER
UDS APPLIANCE KILL SWITCH (OPTIONAL)	KTS & N1	KTS & N1	120 VAC	< 4 AMPS	KILL SWITCH TERMINALS MUST BE IN SERIES WITH OTHER KILL SWITCHES
REMOTE 120VAC ANSUL AUTOMAN (OPTIONAL)	AU1, AU2	SOLENOID	120 VAC	< 6 AMPS	120V TO AU1, AU2 TO ANSUL ELECTRIC AUTOMAN, ANSUL SOLENOID TO NEUTRAL
GAS VALVE	LGV & N1D (IF 24 VDC) GAS & N1 (IF 120 VAC)	RED/RED/GREEN	24 VDC OR 120 VAC	< 1.0 AMPS	IF 24 VDC - 2 WIRES & GROUND, N1D TO RED, LGV TO RED, AND GREEN TO GROUND IF 120 VAC - 2 WIRES & GROUND GAS TO RED, N1 TO RED, AND GREEN TO GROUND



NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

JOB NO  
6758302

MODEL NUMBER  
SC-31110MA

DRAWN BY

SCHEMATIC TYPE  
INSTALL

DESCRIPTION OF OPERATION:  
Fire System #1 TANK FS - 4.0/4.0.

JOB NAME  
CHIPOTLE PRESERVE VILLAGE #50...

DATE  
9/16/2024

DWG NO  
ECP #1-4

# TANK PROTECTION LOW-VOLTAGE DETAIL

10/01/2023 Rev. 3

- ALARM CONTRACTOR:  
1. WIRE MANUAL ACTUATION DEVICE(S), REMOTE FIRESTAT(S), CORE INTERLOCK(S), FIRE SENSOR(S) AND FIRE ALARM CONTACTS  
2. COMPLETE FINAL HOOKUP OF SYSTEM  
3. VERIFY FINAL FIRE SYSTEM TEST

FS-1: MASTER

## ALARM CONTRACTOR REQUIREMENT

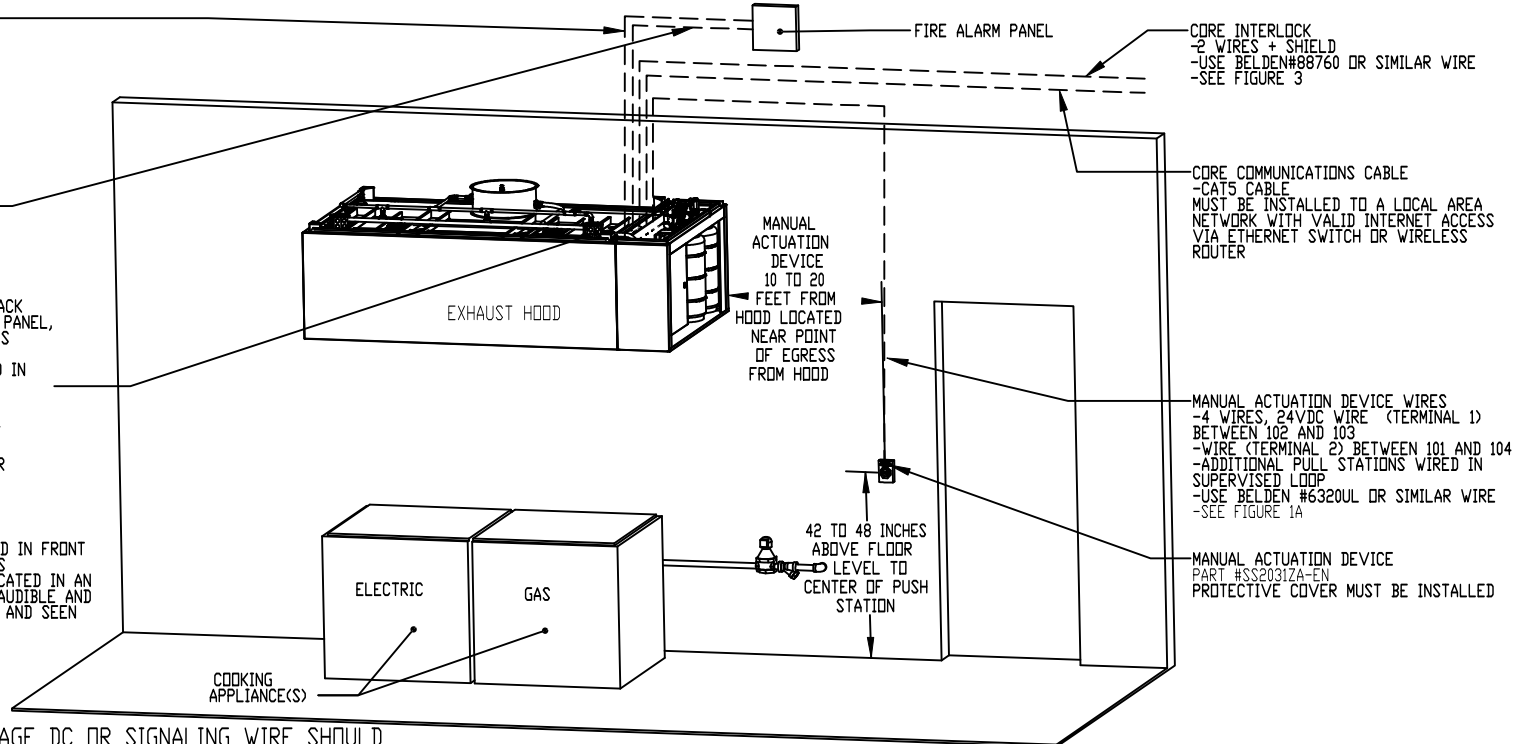
ITEM	CONNECTION IN PANEL	CONNECTION ON DEVICE	VOLTAGE	AMPERAGE	COMMENTS
MANUAL ACTUATION DEVICE(S)	101 AND 104 102 AND 103	1 & 2	24 VDC	< 1.0 AMPS	WIRE MANUAL ACTUATION DEVICE TERMINAL 1 BETWEEN CORE PANEL TERMINALS 102 AND 103 WIRE MANUAL ACTUATION DEVICE TERMINAL 2 BETWEEN CORE PANEL TERMINALS 101 AND 104 JUMPER 101 TO 104 AND 102 TO 103 IF NO MANUAL ACTUATION DEVICE IS INSTALLED
MANUAL ACTUATION DEVICE COVER	N/A	N/A	N/A	N/A	MANUAL ACTUATION DEVICE COVER MUST BE INSTALLED IF SURFACE MOUNTED, USE COVER EXTENSION STI-6531B
REMOTE FIRESTAT SENSOR(S)	21 AND 24 22 AND 23	BLACK AND WHITE	24 VDC	< 1.0 AMPS	WIRE FIRE SENSOR WHITE WIRES BETWEEN HOOD CORE PANEL TERMINALS 22 AND 23 WIRE FIRE SENSOR BLACK WIRE BETWEEN HOOD CORE PANEL TERMINALS 21 AND 24 HIGH TEMP (842°F) #441601C6.FE9 (WHT) & #441601C6.FE0 (BLK) WIRE OR SIMILAR ONLY IF RAN OVER TOP OF HOOD; OTHERWISE BELDEN #6320UL OR SIMILAR PLENUM RATED WIRE; SEE FIGURE 1
FIRE ALARM CONTACT	AL1, AL2	VARIES	50V MAX (AC/DC)	UP TO 1 AMP	FIRE ALARM RELAY CONTACTS FOR BUILDING FIRE ALARM LOCATED IN THE CORE ELECTRICAL CONTROL PANEL
CORE INTERLOCK(S)	CA, CB, CC	CA, CB, CC	RS-485 COMMUNICATIONS SIGNAL		CORE SYSTEM (1) CA, TO CORE SYSTEM (2) CA, CORE SYSTEM (1) CB, TO CORE SYSTEM (2) CB, CORE SYSTEM (1) CC, TO CORE SYSTEM (2) CC. USE BELDEN# 88760 OR SIMILAR WIRE
TROUBLE CONTACT	TBC, TBL, TDK	VARIES	MAX 120 VAC	UP TO 6 AMPS	WIRE TO TBL & TBC NORMALLY OPEN CONTACT, CLOSES IN TROUBLE CONDITION
CORE COMMUNICATIONS CABLE	RJ-45 Jack	INTERNET CONNECTION	SIGNAL	<1.0 AMPS	TYPICAL CONNECTION CAT5 CABLE TO LOCAL AREA NETWORK VIA ETHERNET SWITCH OR WIRELESS ROUTER WITH VALID INTERNET CONNECTION

FIRE ALARM CONTACT  
-2 WIRES WIRE TO NORMALLY  
OPEN CONTACTS (CLOSES IN  
FIRE CONDITION)  
-CORE CONTROL PANEL AL1  
AND AL2  
-SEE FIGURE 2

TROUBLE CONTACT  
-2 WIRES TO NORMALLY  
OPEN CONTACTS (CLOSE  
IN TROUBLE CONDITION)  
-CORE PANEL TERMINALS  
TBL AND TBC  
-SEE FIGURE 4

SUPERVISED LOOP  
-4 WIRES, 24VDC CONNECT BLACK  
WIRES BETWEEN 21 AND 24 IN PANEL,  
CONNECT WHITE (OR RED) WIRES  
BETWEEN 22 AND 23 IN PANEL  
-ADDITIONAL FIRESTATS, WIRE IN  
SUPERVISED LOOP  
-USE HIGH TEMP (842°F)  
#441601C6.FE9 (WHT) &  
#441601C6.FE0 (BLK) WIRE ONLY IF  
RAN OVER TOP OF HOOD;  
OTHERWISE BELDEN #6320UL OR  
SIMILAR PLENUM RATED WIRE  
-SEE FIGURE 1

36 INCHES CLEARANCE REQUIRED IN FRONT  
OF ALL UTILITY CABINET DOORS  
THE PANEL SHALL ALSO BE LOCATED IN AN  
ACCESSIBLE AREA WHERE THE AUDIBLE AND  
VISUAL ALARMS CAN BE HEARD AND SEEN



CORE INTERLOCK  
-2 WIRES + SHIELD  
-USE BELDEN#88760 OR SIMILAR WIRE  
-SEE FIGURE 3

CORE COMMUNICATIONS CABLE  
-CAT5 CABLE  
MUST BE INSTALLED TO A LOCAL AREA  
NETWORK WITH VALID INTERNET ACCESS  
VIA ETHERNET SWITCH OR WIRELESS  
ROUTER

MANUAL ACTUATION DEVICE WIRES  
-4 WIRES, 24VDC WIRE (TERMINAL 1)  
BETWEEN 102 AND 103  
-WIRE (TERMINAL 2) BETWEEN 101 AND 104  
-ADDITIONAL PULL STATIONS WIRE IN  
SUPERVISED LOOP  
-USE BELDEN #6320UL OR SIMILAR WIRE  
-SEE FIGURE 1A

MANUAL ACTUATION DEVICE  
PART #SS2031ZA-EN  
PROTECTIVE COVER MUST BE INSTALLED

ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD  
BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES

NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

JOB NO  
6758302

MODEL NUMBER  
SC-31110MA

DRAWN BY  
INSTALL

SCHEMATIC TYPE

DESCRIPTION OF OPERATION:

Fire System #1 TANK FS - 4.0/4.0.

JOB NAME  
CHIPOTLE PRESERVE VILLAGE #50...

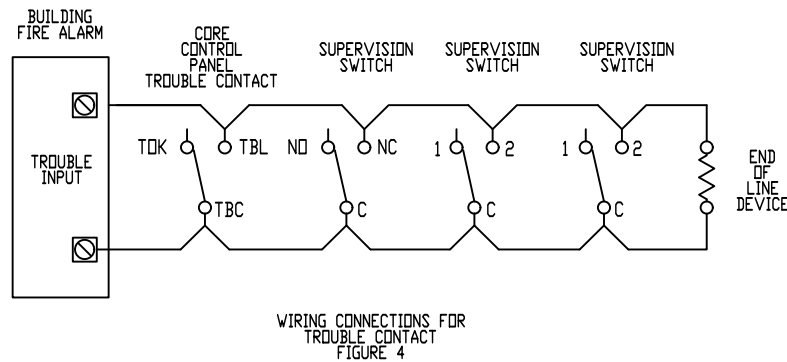
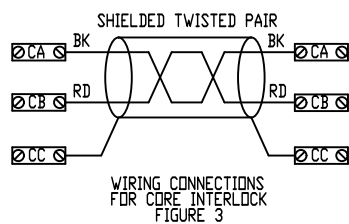
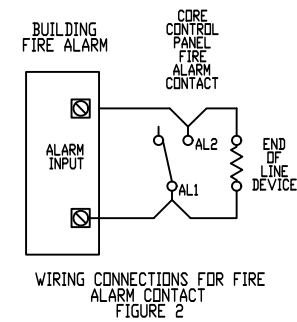
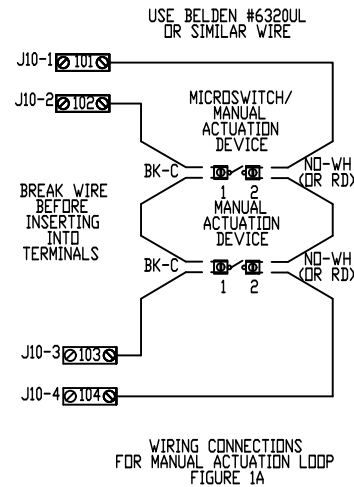
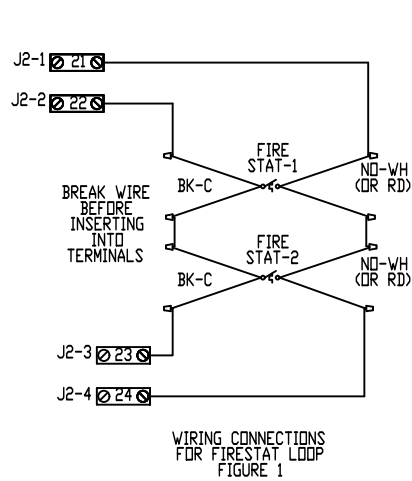
DATE  
9/16/2024

DWG NO  
FCP #1-5

# TANK PROTECTION LOW-VOLTAGE FIGURES

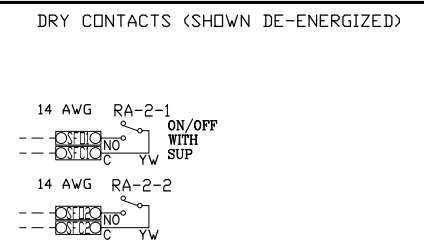
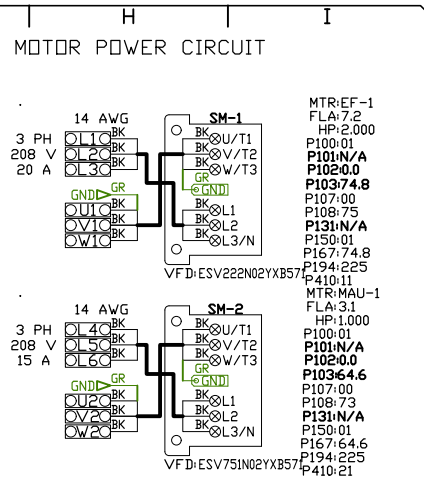
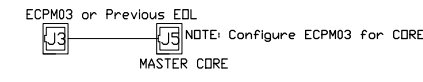
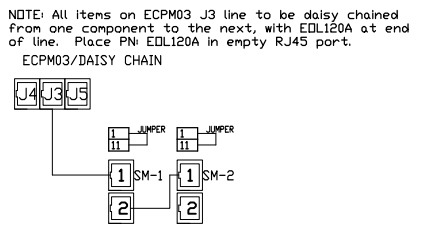
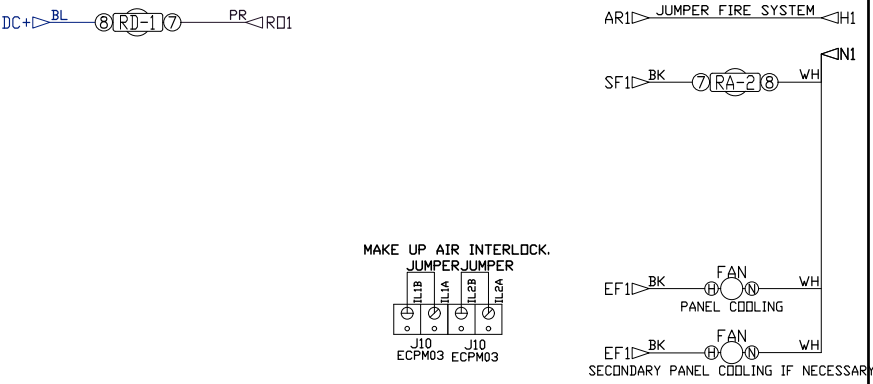
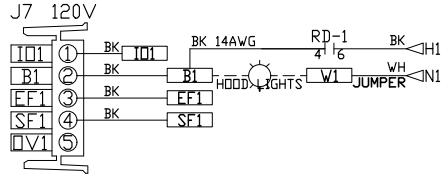
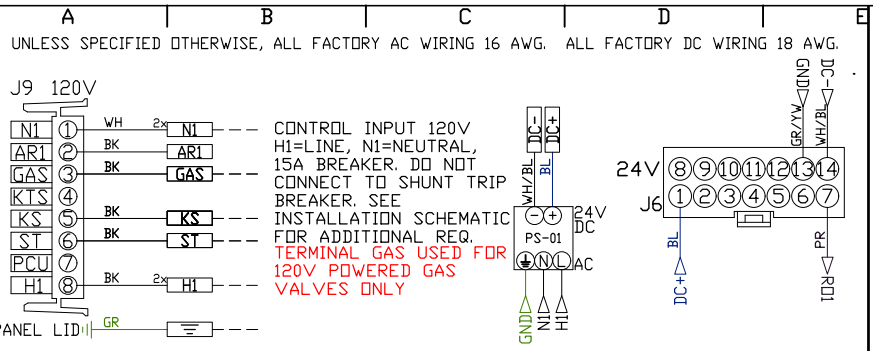
10/01/2023 Rev. 17

## FS-1: MASTER



NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES



**FACTORY WIRING SCHEMATIC CIRCUIT BOARDS**

RA-x	RD-x
120 VAC RELAY	24 VDC RELAY
NO 4 3	NO 4 3
NC 2 1	NC 2 1
COIL 8 7	COIL 8 7
COM 6 5	COM 6 5

**COMPONENT LIST**

LABEL	DESCRIPTION
ST-x	Starter
DL-x	Overload
C-x	Contactor
PS-1	Power Sup. 24VDC
RA-x	120V Relay DPTD
RD-x	24VDC Light Relay
TS-x	Duct Thermostat
CS-x	Current Sensor

**LEGEND**

--- FIELD WIRING  
--- FACTORY WIRING

BK- BLACK W- YELLOW  
BL- BLUE GY- GREY  
BR- BROWN PR- PURPLE  
OR- ORANGE RD- RED  
WH- WHITE  
DR/BL- DR/BL STRIPE  
BL/RD- BL/RD STRIPE  
RD/GN- RD/GN STRIPE  
WH/BL- WH/BL STRIPE

**JOB NAME**

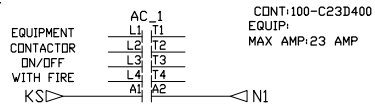
CHIPOTLE PRESERV...

DRAWING TITLE  
SC-31110MA

DESCRIPTION OF OPERATION  
3 Phase w/ control Fan  
1 Exhaust Fan, 1 Supply Fan, Exhaust on In Fire, Lights out in Fire, Relay On/Off with Supply Fan, Fans On/Off  
Thermostatically Controlled. Room temperature sensor shipped loose for field installation. INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD.

JOB NO 6758302	DRAWN BY
TYPE FACTORY	DATE 9/16/2024
DWG NO ECP #1-6	

APPLIANCE CONTACTOR CIRCUITS. SEE INSTALLATION DIAGRAM FOR FIELD WIRING REQUIREMENTS.



**FACTORY WIRING SCHEMATIC**  
**CIRCUIT BOARDS**  
 DCV Rev. 2.10.00  
 HMI Rev. 2.10.00

RA-X 120 VAC RELAY	RD-X 24 VDC RELAY
NO 4 3	NO 4 3
NC 2 1	NC 2 1
COIL 8 7	COIL 8 7
COM 6 5	COM 6 5

**COMPONENT LIST**

LABEL	DESCRIPTION
ST-X	Starter PN varies
C-X	Contactor PN varies
SM-X	VFD PN varies

**LEGEND**

--- FIELD WIRING  
 --- FACTORY WIRING

BK- BLACK YW- YELLOW  
 BL- BLUE GR- GREY  
 BR- BROWN PR- PURPLE  
 OR- ORANGE RD- RED  
 WH- WHITE  
 OR/BL- OR/BL STRIPE  
 BL/RD- BL/RD STRIPE  
 RD/GN- RD/GN STRIPE  
 WH/BL- WH/BL STRIPE

JOB NAME  
 CHIPOTLE PRESERV...

DRAWING TITLE  
 SC-311110MA

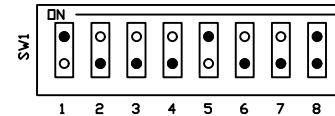
DESCRIPTION OF OPERATION  
 3 Phase w/ control for  
 1 Exhaust Fan, 1 Supply  
 Fan, Exhaust on Fire,  
 Lights out in Fire, Relay  
 DN/OFF with Supply Fan,  
 Fans) DN/OFF  
 Thermostatically  
 Controlled. Room  
 temperature sensor  
 shipped loose for field  
 installation. INVERTER  
 DUTY 3 PHASE MOTOR  
 REQUIRED FOR USE WITH  
 VFD.

JOB NO 6758302	DRAWN BY
TYPE FACTORY	DATE 9/16/2024
DWG NO ECP #1-7	

ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES.

# FS-1: MASTER

## DIP Switch



Master CORE set DIP SW 8 to CLOSED position. Slave CORE with address 1 set DIP SW 8 to CLOSED position. All other CORES set DIP SW 8 OPEN.

### FIRE INDICATOR FAULT CONDITION FLASH CODES

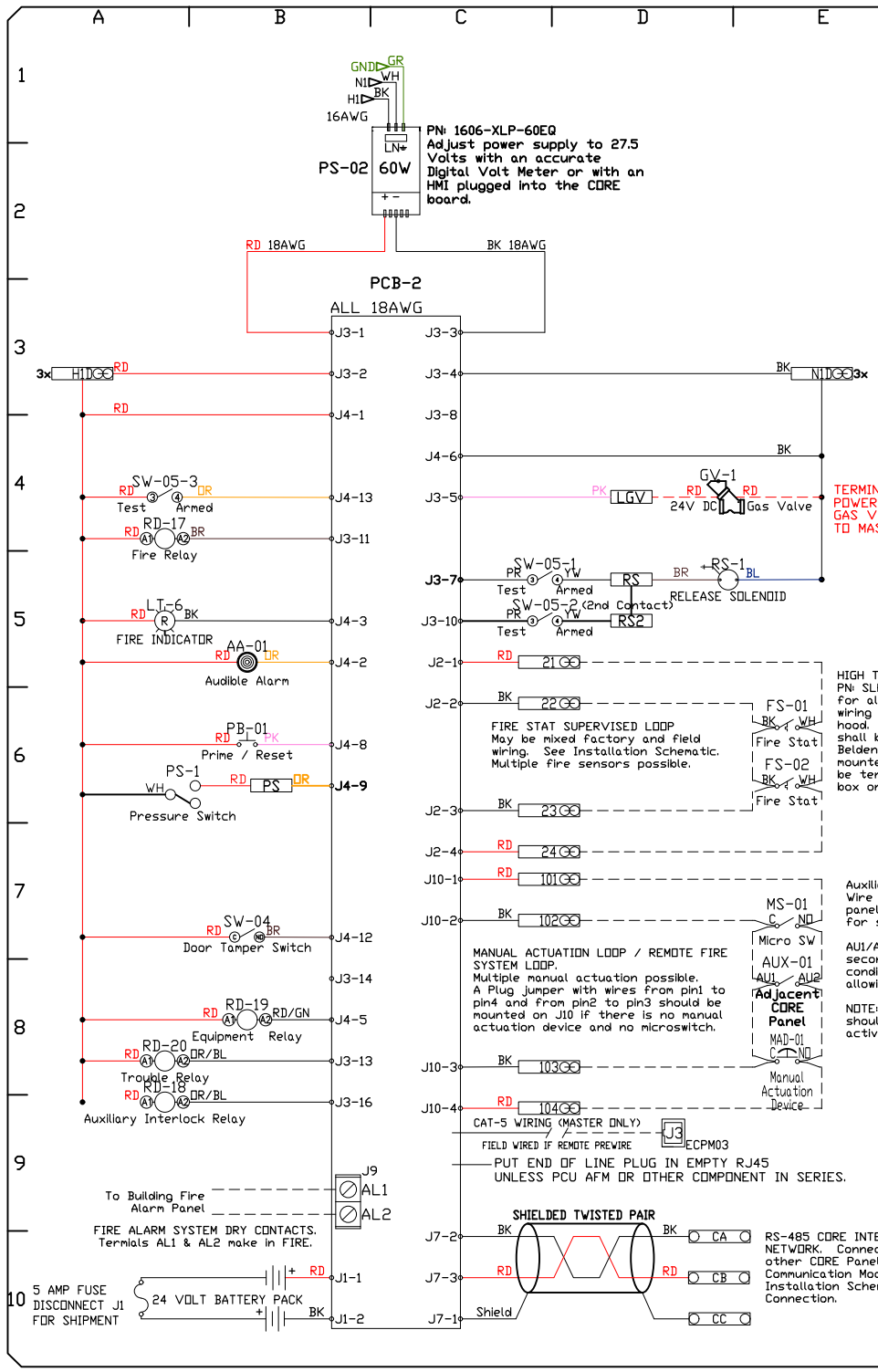
- 1 Audible Alarm
- 2 Release Solenoid
- 3 Pressure Switch
- 4 Auxiliary Fault
- 5 Microcontroller Fault
- 6 N/A
- 7 Supervised Loop
- 8 Ground Fault
- 9 Surfactant Low
- 10 Battery Voltage Low
- 11 AC Power Failure
- 12 Door Tamper Switch
- 13 Test Mode
- 14 CORE Interlock Network
- 15 Fault on Hood in Interlock Network
- 16 Fault on PCU in Interlock Network

FACTORY WIRING SCHEMATIC CORE FIRE PROTECTION			
RA-x	120 VAC	RELAY	
NO	4	3	
NC	2	1	
COIL	8	7	
COM	6	5	
RD-x	24 VDC	RELAY	
NO	4	3	
NC	2	1	
COIL	8	7	
COM	6	5	

COMPONENT LIST	
LABEL	DESCRIPTION
MAD-01	MANUAL ACTIVATION PN DEVICE
PCB-2	CORE PCB
PS-02	PN PCB/CORE-APP
PS-02	CORE POWER SUPPLY
WS-x	PN 1606-XLP-60E Water Solenoid
LT-06	PN varies 24V Red Ind. Light
LL-01	PN WL-1090D1-28V SurF. Level Sensor
AA-01	PN A05510 Audible Alarm
PB-XX	PN SCE10LA3P1B Prime/Reset Switch
SW-05	PN ZB4BA2/ZB4B21015 TEST/ARM Switch
SW-04	PN ZB5A02 Tamper Switch
SW-04	PN BZ-E001-A2 Surfactant Pump
SP-1	PN 50000-805 Surfactant Pump
GV-1	PN 24V DC Gas Valve
FS-XX	PN varies 24V YLW Ind. Light
LT-05	PN WL-1090D3-28V 24V YLW Ind. Light
PS-01	PN P12-F28021-000360 Remote Pull/Push
PWS-01	PN Station ST1-SS243 24VDC Power Suppl
RD-XX	PN 24VDC 18W PDWER 24VDC Phoenix Relay
PS	PN P12-F28021-000360 Pressure Switch
	PN EVC-PRESSURE

LEGEND	
---	FIELD WIRING
---	FACTORY WIRING
BK	BLACK
BL	BLUE
BR	BROWN
DR	ORANGE
WH	WHITE
DR/BL	DR/BL STRIPE
RD/GN	RD/GN STRIPE
WH/BL	WH/BL STRIPE
YW	YELLOW
GY	GREY
PR	PURPLE
GR	GREEN

JOB NAME	
CHIPOTLE PRESERV...	
DRAWING TITLE	
SC-311100A	
DESCRIPTION OF OPERATION	
Fire System #1 TANK FS - 4.0/4.0.	
JOB NO	DRAWN BY
6758302	
TYPE	DATE
FACTORY	9/16/2024
DWG NO ECP #1-8	



TERMINAL LGV USED FOR 24VDC POWERED GAS VALVES ONLY. GAS VALVES SHOULD BE WIRED TO MASTER CORE BOARD ONLY.

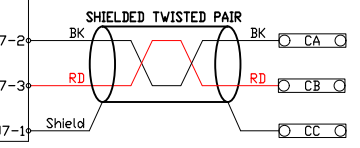
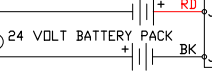
HIGH TEMP WIRE (842 F), PN: SLP/CON-xFT required for all Supervised Loop wiring in contact with a hood. All other wiring shall be PN: 6320UL, Belden or similar. Factory mounted hood sensors will be terminated at junction box on top of hood.

Auxiliary Interlock (AUX-01): Wire AUI / AUI2 of adjacent Master CORE panel(s) in each manual activation loop for simultaneous activation.

AUI/AUI2 will have continuity for 10 seconds if adjacent panel goes into fire condition, activating this CORE Panel but allowing for a reset after 10 seconds.

NOTE: AUI/AUI2 terminals of CORE Panel should not be wired into its own manual activation loop.

5 AMP FUSE DISCONNECT J1 FOR SHIPMENT



RS-485 CORE INTERLOCK NETWORK. Connection to other CORE Panels or Communication Module. See Installation Schematic for Connection.

SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

   Intertek	<b>JOBCHIPOTLE PRESERVE VILLAGE #5005</b>	
	<b>LOCATION</b> Eden Prairie, MN, 55347	
	<b>DATE</b> 9/16/2024	<b>JOB #</b> 6758302
	<b>DWG #</b> 24	<b>DRAWN BY</b> JMB-40
	<b>REV.</b>	<b>SCALE</b> 3/8" = 1'-0"